The Bean Bag

A newsletter to promote communication among research scientists concerned with the systematics of the Leguminosae/Fabaceae

Number 46 November 1998

From the Editors

Barbara Mackinder and Gwilym Lewis

The Bean Bag is designed to promote communication among research scientists concerned with legume systematics. To achieve this goal The Bean Bag is issued in November of each year and features six columns: From the Editors, News (meetings, major events, announcements, etc.), Latin American Legume Report, Nodulation and Nitrogen Fixation (new nodulation records), Gleanings, and Recent Legume Literature. Data in the Gleanings column are derived from questionnaire sheets which Readers complete and return. If you have news about legume systematics, send it to us for this column. The Recent Legume Literature column contains published research papers of specific interest to Bean Bag Readers and is derived from Readers contributions in conjunction with references from The Kew Record (Kew's current awareness list of taxonomic literature). Recent is defined as up to 18 months old. Specific interest to Bean Bag Readers is defined as research papers of interest to a worldwide group of legume systematic botanists. We encourage Bean Bag Readers to send us notices, observations, etc.

The Bean Bag and the Directory can now be delivered to Readers via e-mail. If you wish to have your copies e-mailed to you, please send the following standard e-mail message

To: beanbag-request@rbgkew.org.uk - Subscribe BeanBag <my e-mail address>.

Electronic copies of the current and past Bean Bags and the Directories can be obtained from the World Wide Web server of the Royal Botanic Gardens, Kew, United Kingdom From June, 1995, *The Bean Bag* is available on the World Wide Web at http://www.rbgkew.org.uk/herbarium/legumes/beanbag.html

Bean Bag address:

Mrs B. Mackinder, Bean Bag Editor, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, United Kingdom email:b.mackinder@rbgkew.org.uk

NEWS

Editorship Of The Bean Bag Number 46 (November 1998)

Barbara Mackinder

Barbara Mackinder is on a 12 months sabbatical at the Royal Botanic Gardens, Edinburgh (Scotland) studying for a Masters degree in Plant Taxonomy and Biodiversity. This particular issue is jointly edited by Mackinder and Lewis (RBG, Kew). All correspondance, email etc. should continue to be directed to B. Mackinder at RBG, Kew.

The Rupert Barneby Award

James L. Luteyn

The New York Botanical Garden is pleased to announce that Basil Stergios of the Universidad Nacional Experimental de Los Llanos Occidentales "Ezequiel Zamora", Mesa de Cavacas, Venezuela, is the recipient of the 1997 Rupert Barneby Award. Dr Stergios will be working on the general Caesalpinioid legumes of Latin America and floral treatments for Flora Neotropica and Flora of the Guianas.

The New York Botanical Garden also invites applications for the 1998 Rupert Barneby Award. The award of \$1,000 is to assist researchers to visit The New York Botanical Garden to study the rich collection of *Leguminosae*. Anyone interested in applying for the award should submit their curriculum vitae and a detailed letter describing the project for which the award is sought. Travel to NYBG should be planned for sometime in 1999. The letter should be addressed to Dr. James L. Luteyn, Institute of Systematic Botany, The New York Botanical Garden, Bronx, NY 10458-5126 USA, and received no later than December 1, 1998. Announcement of the recipient will be made by December 15th. Anyone interested in making a contribution to THE RUPERT BARNEBY FUND IN LEGUME SYSTEMATICS, which supports this award, may send their check, payable to The New York Botanical Garden, to Dr. Luteyn.

Leucaena: Taxonomic Monograph and Genetic Resources Handbook

Colin E. Hughes

Most foresters and agronomists who work in the tropics will, at some point, have set eyes on a Leucaena tree. In the majority of cases they will have observed a tree of one of a handful of genetically uniform varieties of one species, Leucaena leucocephala. It is a ubiquitous, small, seedy tree that occurs in most tropical countries. Whether that tree is viewed as a valuable asset providing basic products to smallholder farmers, as a salvation for sloping lands, as the 'alfalfa of the tropics' to commercial beef producers, or cursed as an undesirable alien weed depends on the perspective of the observer. Leucaena means different things to foresters, agronomists, pasture production scientists, veterinarians, botanists, ecologists and conservation biologists. However, for almost all, Leucaena means Leucaena leucocephala. Apart from those who live in the native home of Leucaena in Mexico and Central America and a small number of specialists, few are fully aware of the diversity of species which exists within the genus. There are 22 recognised species. They span 40 degrees of latitude and 2500m in altitude and grow under varied climatic and soil conditions. They have diverse sizes, tree forms, growth rates, pest tolerances, site adaptabilities, phenologies, wood and leaf qualities and weedy attributes. They are highly crossable and form hybrids with ease. Several show high levels of within species diversity. All this diversity has remained poorly known and, until recently, largely untapped. Two new complementary publications, a Taxonomic Monograph and a Genetic Resources Handbook aim to document what is known about diversity within Leucaena and present it as a whole to a wider audience.

The Monograph is volume 55 of Systematic Botany Monographs published by the American Society of Plant Taxonomists. Copies (\$32 for US orders, \$34 for non US orders) are available from Systematic Botany Monographs, University of Michigan Herbarium, North University Building, Ann Arbor, MI 48109-1057, USA.

The Handbook includes chapters on systematics, species characteristics, ethnobotany and indigenous domestication, hybrids, germplasm collections, seed collection, processing, storage and pretreatment, conservation, domestication, identification, and a series of species accounts which include more detailed information, along with full botanical drawings and distribution maps for all species in the genus. It is number 37 in the Oxford Forestry Institute, Tropical Forestry Paper series, is softbound, 280 pages in length, and includes 8 pages of colour plates and 68 figures. It is available in English and Spanish FREE to institutions in developing countries, as part of the UK Department For International Development Forestry Research Programme's policy of disseminating research results as widely as possible. For institutions and individuals in developed countries, the price is £20 plus handling and postage, with a 50% discount for students. Requests to: Colin Hughes, Dept. of Plant Sciences, University of Oxford, S. Parks Rd, OXFORD, OX1 3RB, UK.

Fax: +44 (0)1865 275074. Email: colin.hughes@plants.ox.ac.uk

Nodulation and Nitrogen Fixation

(Legume Nodulation Reports not in Allen and Allen (1981))

Joseph H. Kirkbride, Jr.

Taxon	Status	Source	
Acacia adsurgens Maiden & Blakely	+	2	
Acacia ampliceps Maslin	+	2	
Acacia caven (Molina) Molina	+	5	
Acacia cochliacantha Willd.	+	2	
Acacia cyclops A. Cunn. ex G. Don	+	2	
Acacia macracantha Humbl. & Bonpl. ex Willd.	+	2	
Acacia pennatula (Schdl. & Cham.) Benth.	+	2	
Acacia praecox Griseb.	-	5	
Acacia pteridifolia Benth.	-	4	
Acacia sclerosperma F. Muell.	+	2	
Acacia stenophylla A. Cunn. ex Benth.	+	2	
Acacia velutina DC.	-	4	
Abarema auriculata (Benth.) Barneby & Grimes	+	4	
Abarema coclheata (Willd.) Barneby & Grimes	+	4	
Abarema turbinata (Benth.) Barneby & Grimes	+	4	
Acosmium cardenasii Irwin & Arroyo	-	4	
Aeschynomene fluminensis Vell. Conc.	+	4	
Albizia decandra (Ducke) Barneby & Grimes	+	4	
Albizia niopoides (Benth.) Burkart	+	4	
Albizia polycephala (Benth.) Killip	+	4	
Andira surinamensis (Bondt.) Splitg. ex Pulle	+	4	
Aspalathus linearis (Burm. f.) R. Dahlgren	. +	3	
Astragalus tener A. Gray	+	1	
Ateleia glazioveana Baillon	-}-	4	
Balizia pedicellaris (DC.) Barneby & Grimes	+	4	
Bauhinia bauhinioides (Martius) Macbr.	-	4	
Bauhinia brevipes Vogel	-	4	
Bauhinia forficata Link	-	5	
Bauhinia pentandra (Bong.) Vogel ex Steud.	-	4	
Bergeronia sericea M. Micheli	+	4	
Bocoa mollis (Benth.) Cowan			

Taxon	Status -	Source 4
Bowdichia nitida Benth.	+	4
Caesalpinia pluviosa DC.	-	4
Calliandra acapulcensis (Britton & Rose)	+	4
Calliandra houstoniana (Miller) Standley	+	4
Calliandra juzepczukii Standley	+	4
Calliandra macrocalyx Harms	+	4
Calliandra parviflora Benth.	+	4
Campsiandra comosa (Benth.) Cowan	+	4
Chamaecrista desvauxii (Collad.) Killip	+	4
Chamaecrista repens (Vogel) Irwin & Barneby	+	4
Chamaecrista viscosa (H.B.K.) Irwin & Barneby		·
var. major (Benth.) Irwin & Barneby	+	4
Chamaecytisus proliferus (L. f.) Link	+	6
Cynometra spruceana Benth.	<u>.</u>	4
Cytisus canariensis Steud.	+	6
•	+	4
Dalbergia hortensis Heringer, Rizzini & Mattos	+	4
Dalbergia spruceana Benth.	+	4
Dimorphandra macrostachya Benth.	+	<u>4</u> Д
Diplotropis brasiliensis (Tul.) Benth.	-	4
Dipteryx alata Vogel	+	4
Enterolobium maximum Ducke	+	6
Genista stenopetala Webb & Berth.	+	4
Goldmania paraguensis (Benth.) Brenan	т	4
Guibourtia chodatiana (Hassler) J. Leonard	<u>-</u> _	1
Hoita macrostachya (DC.) Rydb.	+	1
Hydrochorea corymbosa (Rich.) Barneby & Grimes	+	4
Hymenolobium excelsum Ducke	+	4
Hymenolobium nitidum Benth.	+	1
Lathyrus jepsonii E. Greene	+	2
Lens ervoides (Brign.) Grande	+	2
Lens orientalis (Boiss.) Popov.	+	4
Lonchocarpus virgilioides (Vogel) Benth.	+	1
Lupinus affinis J. Agardh	+	1
Lupinus arizonicus (S. Watson) S. Watson	+	1
Machaerium nictitans (Vell. Conc.) Benth.	+	4
Macrolobium huberianum Ducke	-	4
Macrosamanea pubiramea (Steudel) Barneby & Grimes	+	4
Martiodendron elatum (Ducke) Gleason	-	4
Mimosa arenosa (Willd.) Poiret	+	4
Mimosa dolens Vell. Conc. var. rigida (Benth.) Barneby	+	4
Mimosa guilandinae (DC.) Barneby	+	4
Mimosa pellita H.B. ex Willd.	+	4
Mimosa sensibilis Griseb.	+	· ·
Mimosa setosa Benth. var. paludosa (Benth.) Barneby	+	4 4
Mimosa velloziana Martius	+	4
Mimosa xanthocentra Martius	+	4
Mimozyganthus carinatus (Griseb.) Burkart	-\	4
Nissolia fruticosa Jacq.	-	4
Ormosia arborea (Vell. Conc.) Harms	+	4
Ormosia holerythra Ducke	+	4
Ormosia nobilis Tul.	+	4
Parkia timoriana (DC.) Merr.	-	4
Parkia velutina Benoist	-	4
Peltophorum dubium (Sprengel) Taubert	-	3

Taxon	Status	Source
Piptadenia adiantoides (Sprengel) Macbr.	+	4
Piptadenia moniliformis Benth.	+	4
Piptadenia viridiflora (Kuntze) Benth.	+	4
Plathymenia reticulata Benth.	+	4
Platymiscium floribundum Vogel	+	4
Prosopis nigra (Griseb.) Hieron	+	5
Pseudopiptadenia psilostachya (DC.) Lewis & Lima	+	4
Pterocarpus erinaceus Poiret	+	4
Pterocarpus lucens Guillemin & Perrottet	+	4
Riedeliella graciliflora Harms	+	4
Senna sophera (L.) Roxb.	-	2
Senna tapajozensis (Ducke) Irwin & Barneby	-	4
Sesbania punicea (Cav.) Benth.	+	1
Stryphnodendron racemiferum (Ducke) W.	+	4
Swartzia glazioviana (Taubert) Glaziou	+	4
Taralea cordata Ducke	-	4
Tetrapleura tetraptera (Schum. & Thonner)	-	4
Thermopsis inflata Cambess.	+	2
Trifolium barbigerum Torr.	+	1
Trifolium cyathiferum Lindl.	+	1
Trifolium gracilentum Torr. & A. Gray.	+	1
Trifolium variegatum Nutt.	+	1
Zygia cataractae (H.B.K.) L. Rico	+	4

Status: +, root nodules reported as present;

-, root nodules reported as absent.

Source:

- 1. Athar, M. 1996. Observations on nodulation status of some papilionoid species of potential agricultural and forestry value from Sacramento Valley, California. Taiwania 41(4): 301-308.
- 2. Athar, M. 1997. A qualitative study of the nodulating ability of legumes of Pakistan. List 5. Acta botanica Gallica 144(1): 67-72.
- 3. Dart, P. 1998. Nitrogen fixation by tropical trees and shrubs. In: C.Elmerich et al., eds., Biological Nitrogen Fixation for the 21st Century, pp. 667-670. Kluwer Academic Publishers, The Netherlands.
- 4. Faria, S.M. da, and H.C. de Lima. 1998. Additional studies of the nodulation status of legume species in Brazil. Plant and Soil 200: 185-192.
- 5. Frioni, L., R. Dodera, D. Malates, and I. Irigoyen. 1998. An assessment of nitrogen fixation capability of leguminous trees in Uruguay. Applied Soil Ecology 7: 271-279.
- 6. Vinuesa, P., J.L.W. Rademaker, F.J. de Bruijn, and D. Werner. Genotypic characterization of *Bradyrhizobium* strains nodulating endemic woody legumes of the Canary Islands by PCR-restriction fragment length polymorphism analysis of genes encoding 16S rRNA (16S rDNA) and 16S-23S rDNA intergenic spacers, repetitive extragenic palindromic PCR genomic fingerprinting, and partial 16S rDNA sequencing. Applied and Environmental Microbiology 64(6): 2096-2104.

GLEANINGS

Eds. Note: Proper names in all capital letters are Bean Bag Readers. Their full names and addresses are listed in the Nov 1998 Bean Bag Directory available on the www server of the Royal Botanic Gardens, Kew, United Kingdom. See "From the Editors" for the URL.

Andary, HOSSAERT and MCKEY are studying the exudation of allelochemicals by imbibing seeds of two species of Sesbania (S. drummondii and S. vesicaria) presenting contrasting traits of life history. They need seeds from other species of annual and perennial Sesbania as well as from closely related species of other genera of papilionoid Legumes. They also seek seeds of plants of other families presenting tegumentary dormancy (Rhamnaceae, Malvaceae, Boraginaceae).

ANULOV is undertaking a study of the chemotaxonomy and evolution of the *Galegeae*. He needs seeds of *Galegeae* and offers in exchange, reprints and seeds of Russian Legumes.

BENNETT is studying genetic diversity between and within populations of five *Trifolium* species from Turkey. Also studying genetic variation within and between two populations of *Trifolium tomentosum* (woolly clover) from Western Australia and Syria. She needs information on outbreeding rates of *Trifolium* species using RAPD's or electrophoresis, or an alternative method. She is starting work on the problems in PBR legislation - Natural versus Breeder's selection from a wild population, and the advantage of outcrossing clover species in a pasture using traditional quantitative genetics, isozymes and AFLP's. She offers in exchange, advice on use of geographical information systems, ecogeographical analysis and on genetic variation in inbreeding and outcrossing of clovers.

BEYRA-MATOS has completed an account of *Galactia* for the Flora of Cuba and is now working on the taxonomy of endangered and endemic Cuban Legumes.

BEYRA-MATOS and LAVIN have started work on monographic treatments of *Belairia* and *Pictetia*. Burghardt see HOC

CHEN is studying the classification and phytogeography of *Pueraria* from Yunnan.

DEVINE is studying green manure and living mulch crops for sustainable agriculture. He needs pubescent forms of cow pea for his research.

DIEDERICHSEN with Hanelt, Heller and Kruse are preparing a revision of the Leguminosae for a new edition of the Mansfeld World Manual of Cultivated Plants (last edition in German in 1986).

Drewes see HOC

ESPINOSA-HERNANDEZ is studying the effects of interplanting *Lupinus mutabilis* and *Zea mays* with respect to phosphorus nutrition on Andosol of the Sierra Tarasca, Michocacan, Mexico.

EZE is continuing to screen for drought resistance among legume crops in dry savannah areas of SE Nigeria.

FORTUNATO is studying the Tribe Cassinae from Paraguay and Argentina. She needs Galactia, Collaea, Rhynchosia, Eriosema and Camptosema from Argentina and Paraguay, and Galactia, Collaea, Rhynchosia, Eriosema from the Neotropics. She offers in exchange, Legume genera from the Patagonia Region.

Hanelt and Heller see DIEDERICHSEN

HOC with Drewes and Burghardt are undertaking a study of the reproductive success under culture of Legumes with forage, food, medicinal or ornamental value (*Phaseolus vulgaris* var *aborigineus*, *Phaseolus augustii* and *Macroptilium spp* HOSSAERT see Andary

IGNACIMUTHU is studying the prevention of post-harvest loss in Legumes.

KOZACHKOVA is undertaking a PhD, the subject of which is the "Introduction of trees and shrubs from Souh America on the Black Sea Coast of Caucasus". She needs seeds of South American species of the following genera, Caesalpinia, Calliandra, Cassia, Erythrina, Inga, Mimosa, Prosopis, Adesmia and Bauhina and of the following species, Copaifera trapezifolia, Dalbergia brasiliensis, Holocalyx balsanae, Myrocarpus frondosum, Parkinsonia aculeata and Apuleia leiocarpa.

Kruse. see DIEDERICHSEN

KUMAR, Sushil is undertaking DNA finger printing of the morphological mutants of pea Pisum sativum.

LAVIN see BEYRA-MATOS

LIU (new reader) is beginning a study of the demography of Chamaecrista linearis var. keyensis.

LOC and VIDAL have revised Millettieae (Sarcodum, Afgekia, Endosamara, Antheroporum, Calleyra, Aganope, Derris, Pongamia, Craspedolobium, Lonchocarpus, Millettia and Tephrosia) for the Flora du Cambodge, du Laos et du Vietnam. The editorial work and drawings are underway and it is hoped the account will be published in 1999.

MACKINDER is undertaking a preliminary phylogenetic study of *Berlinia and Isoberlinia* (using morphological and molecular data) and plans to revise *Berlinia* and *Isoberlinia* as part of her PhD thesis.

MCKEY see Andary

MENDONCA-FILHO Is working on the cytotaxonomy of *Machaerium* Pers. and revising Sect. Oblonga (Benth.) Taub. (*Leguminosae-Papilionoideae*) (PhD. Theses). He needs fruits of *Machaerium* for germination and offers in exchange, identifications of *Machaerium*.

MOREIRA needs seeds of Macroptilum atropurpureum and offers in exchange seeds of tropical legumes.

NASH is conducting detailed analysis of *Sophoreae* for alkaloids for taxonomic and activity studies. He needs any seeds, leaves or bark of *Baphia sp.*, *Baphiastrum sp.*, *Alexa sp.*, *Lonchocarpus sp.* or *Derris sp.* He offers in exchange, detailed chemical data and information on active components.

PLANCHUELO is directing a project that combines taxonomic studies of wild species of *Lupinus* from South America with evaluation of cultivated lupins as a grain crop for marginal lands in Central Argentina. She needs herbarium specimens of *Lupinus* and *Crotalaria* and offers in exchange, herbarium specimens of Central Argentinan Legumes.

POKLE is undertaking a revision of genus Alysicarpus Desv. in India. (funded by University Grants Commission, New Delhi.). He needs information on type material in the herbaria especially from Australia, China, Africa, Egypt and seeds of Alysicarpus species (packet of at least 40 seeds) and can reimbursement postage or other costs. He offers in exchange, any legume material from the region, either herbarium sheets, seeds or wet preservations, or literature of Indian Alysicarpus Desv.

SIMPSON is continuing her work on the phylogeny of *Caesalpinieae* and needs material of *Caesalpinieae* for molecular work. She offers in exchange, Central Texas Legumes.

THOTHATHRI is undertaking a survey and study of the less known Legumes of South India (The States of Tamil Nadu, Andhra Pradesh, Kerala and Karnataka are covered). He offers in exchange, reprints on Asiatic Legumes (Taxonomy & Systematics).

VIDAL see LOC

VANDERBORGHT is maintaining a *Phaseoleae-Phaseolinae* collection, chiefly centred on wild *Phaseolus and Vigna* species. He offers and needs seed material of the same. List of the 180 taxa included in the collection is available on the World Wide Web on http://www.br.fgov.be.

VEASEY is beginning a study of the selection of herbaceous forage Legumes for the use in mixed pastures.

VERESHCHAGINA is working on the reproductive biology and systematics of the annual species of *Medicago* and cleistogamy in annual species of *Medicago*.

VIRASSO is working on the Systematics of the flora local to Sante Fe, Argentina and offers in exchange, herbarium specimens.

RECENT LEGUME LITERATURE

Eds. Note: Authors names in all capital letters are Bean Bag Readers. Their full names and addresses are listed in the Nov 1998 Bean Bag Directory available on the www server of the Royal Botanic Gardens, Kew, United Kingdom. See "From the Editors" for the URL. All correspondance should be addressed directly to them.

- Abou El Enain, M.M., El Shazly, H.H., El Kholy, M.A. 1998. Karyological studies in some African species of the genus *Sesbania* (Fabaceae). Cytologia 63(1): 1-8 Illus. Chromosome numbers.
- ADEMA, F. 1998. Notes on Malesian Fabaceae (Leguminosae: Papilionoideae): 3. The genera *Dioclea*, *Luzonia*, and *Macropsychanthus*. Blumea 43(1): 233-239 Keys.
- Agnese, A.M., Juliani, H.R., Cabrera JL 1998. Chemotaxonomic features of lipophilic components in *Adesmia* species Leguminosae). Pl. Syst. Evol. 210(1-2): 141-145 Chemotaxonomy.
- Armstrong, W.P. 1998. Unusual drift fruit from Costa Rica. Drifting Seed 4(2): 7-8 Illus
- Asmussen, C.B., Liston, A. 1998. Chloroplast DNA characters, phylogeny, and classification of *Lathyrus* (Fabaceae). Amer. J. Bot. 85(3): 387-401
- Athar, M. 1997. Nodulation status of some legume species from Cache Valley and northern Utah. Phytologia 81(3): 145-150 (1996 publ. 1997)
- Athar, M., Shabbir, S.M. 1997. Nodulation characteristics of some of the forage and browse legumes. Phytologia 82(1): 12-
- Australian Biological Resources Study. 1998. Flora of Australia: volume 12. Mimosaceae (excl. *Acacia*), Caesalpiniaceae. Canberra: ABRS/CSIRO,1998 xx, 213p. Illus. Icones, Maps, Anatomy and morphology, Keys. Many new taxa.
- Aymard, C. G. 1998. Canavalia rosea (Sw.) DC. versus Canavalia maritima (Aubl.) Thouars(Papilionoideae). Ernstia 8(1): 19-25
- Aytac, Z., Ekim, T. 1997. Sphaerophysa kotschyana Boiss. Fabaceae/Leguminosae (Baklagiller). Karaca Arbor. Mag. 4(2): 89-94 col. illus. Maps.
- Baggott, C.D. 1997. A herbarium-based ecogeographic survey of the genus *Lathyrus* section Lathyrus. Birmingham: School of Biological Sciences, University of Birmingham, 1997–122p. Maps, Chromosome numbers. Thesis: University of Birmingham:
- Bailey, C.D., DOYLE, J.J., Kajita, T., NEMOTO, T., OHASHI, H. 1997. The chloroplast rp12 intron and ORF184 as phylogenetic markers in the legume tribe Desmodieae. Syst. Bot. 22(1): 133-138
- BANDYOPADHYAY and Sharma, B.D. 1993. Observations on the pollen morphology of some Bauhinias (Leguminosae: Caesalpinioideae) from India. Bull. Bot. Surv. India 35(1–4): 32–39. Published on 3 July 1997.
- Barham, J. 1997. Plant portraits: 327. Campylotropis polyantha. Leguminosae: Papilionoideae. Curtis's Bot. Mag. 14(4): 203-207 illus., col. illus. Icones, Anatomy and morphology.
- Barneby, R.C. 1997. Toward a census of genus *Mimosa* (Mimosaceae) in the Americas: a new species from Mexico (Baja California Sur) and two from planaltine Brazil (Goias, Minas Gerais). Brittonia 49(4): 452-457 illus. Icones, Anatomy and morphology.
- BARRETO VALDES, A. 1997. El genero *Indigofera* L. (Fabaceae, Faboideae) Cuba. Fontqueria 48: 187-193 Russian. Maps, Anatomy and morphology, Keys.
- BARRETO VALDES, A, BEYRA MATOS, A. 1997. Acerca de *Caesalpinia pinnata* (Griseb.) Cr. Wr. (Fabaceae, Caesalpinioideae) y especies afines. Fontqueria 48: 179-185 Maps, Keys.
- Baskauf, C.J., Snapp, S. 1998. Population genetics of the cedar-glade endemic Astragalus bibullatus (Fabaceae) using isozymes. Ann. Missouri Bot. Gard. 85(1): 90-96 Maps.
- Batlle, I., Tous, J. 1997. Carob tree: Ceratonia siliqua L. Rome: International Plant Genetic Resources Institute; Gatersleben: Institute of Plant Genetics and Crop Plant Research, 1997 92p. illus. SERIES(Promoting the conservation and use of underutilized and neglected crops; 17) Icones, Anatomy and morphology, Reproductive biology. Taxonomy, description, reproductive biology, origin pp.9-22

- Benedi, C. 1998. Hymenocarpos circinnata (L.) Savi (Loteae, Leguminosae), planta iberica? (Hymenocarpos circinnata (L.) Savi (Loteae, Leguminosae), an Iberian plant) An. Jard. Bot. Madrid 56(1): 181
- Benedi, C. 1998. Hymenocarpos lotoides (L.) Lassen o Hymenocarpos lotoides (L.) G. Lopez (Loteae, Leguminosae). (Hymenocarpos lotoides (L.) Lassen or Hymenocarpos lotoides (L.) G. Lopez (Loteae, Leguminosae).) An. Jard. Bot. Madrid 56(1): 182 Sp
- BENNETT, S.J. (1997). Genetic variation between and within two populations of *Trifolium glomeratum* (cluster clover) in Western Australia. Australian Journal of Agricultural Research 48: 969–976.
- BENNETT, S.J. MAXTED, N. Sebanci, C.O. 1998. The ecogeographical and collection of grain, forage and pasture legumes in south-west Turkey. Genetic Resources and Crop Evolution 45(3): 253-263.
- BENNETT, S.J., MAXTED,N. 1997. An ecogeographical analysis of the *Vicia narbonensis* complex. Genetic Resources and Crop Evolution. 44: 411-428.
- Berry, P.E., Aymard, G., Romero, G.A. 1997. *Copaifera camibar* (Caesalpiniaceae), a useful and locally common, but previously unreported species in Venezuela. BioLlania ed. especial no.6: 275-279 illus
- Bidgood, S., Friis, I. 1998. Sesbania melanocaulis, sp. nov. (Leguminosae subfam. Papilionoideae) from S.W. Ethiopia. Nordic J. Bot. 18(2): 209-213 Illus. Icones, Maps, Anatomy and morphology.
- Biswas, S., Chandra, S. 1997. *Indopiptadenia oudhensis* (Brandis) Brenan: an endangered tree legume of Uttar Pradesh and Nepal. Indian Forester 123(5): 419-421 illus.
- Blackstock, T.H., Roberts, R.H. 1998. *Trifolium occidentale* D.E. Coombe (Fabaceae) in Anglesey (V.C. 52). Watsonia 22(2): 182-184 Maps.
- Brandao, M., Costa, N.M., de S. 1997. *Centrosema teresae* Brandao et Costa, uma nova Fabaceae para o estado de Minas Gerais, Brasil. Daphne 3(1): 5-6 illus. Icones, Anatomy and morphology.
- Breteler, F.J., Ferguson, I.K., Gasson, P.E., Welle, B.J.H. 1997. *Colophospermum* reduced to *Hardwickia* (Leguminosae: Caesalpinioideae). Adansonia 19(2): 279-291 illus., French, Icones, Maps, Anatomy and morphology, Palynology, Keys.
- Bukhari, Y.M. 1997. Cytoevolution of taxa in *Acacia* and *Prosopis* (Mimosaceae). Austral. J. Bot. 45(5): 879-891 illus. Chromosome numbers.
- Bullock, J.M., Connor, J., Carrington, S., Edwards, R.J. 1998. Chromosome numbers and flower sizes of *Ulex minor* Roth. and *Ulex gallii* Planch. in Dorset. Watsonia 22(2): 143-152 Illus. Maps, Chromosome numbers.
- Burghardt, A.D., Palacios, R.A. 1997. Electrophoretic characterization of the American sections of *Prosopis* L. (Leguminosae: Mimosoideae). Bull. Int. Group Study Mimos. no.20: 71-83 Maps.
- Butcher, R. 1998. Sphaerolobium pubescens and Sphaerolobium rostratum (Leguminosae: Mirbelieae), new species from Western Australia. Nuytsia 12(2): 171-178 Illus. Icones, Maps, Anatomy and morphology.
- Cangiano M.A, Zanin LA, Losinno HN 1998. El cariotipo de *Ramorinoa girolae* (Fabaceae). Kurtziana 26: 173-177 Illus. chromosome numbers. Argentina
- Canto, P., Rivas, Martinez, S., Greinwald, R., Rensen, I., van 1997. Revision de *Genista* L. sect. Spartioides Spach la Peninsula Iberica y Baleares. (Review of *Genista* L. sect. Spartioides Spach in the Iberian Peninsula and Balearic Islands.) Lazaroa 18: 9-44 illus.
- CARDENAS, L. 1997. *Inga ornata* Kunth (Leguminosae: Mimosoideae), nuevo registro para la flora deVenezuela. Ernstia 7(1-4): 3-6 illus. Icones.
- Cardoso M.A, Provan J., Powell W., Ferreira PCG, De Oliveira DE 1998. High genetic differentiation among remnant populations of the endangered *Caesalpinia echinata* Lam. (Leguminosae: Caesalpinioideae). Molec. Ecol. 7(5): 601-608 Maps.
- Carswell F.E., Gould K.S. 1998. Comparative vegetative development of divaricating and arborescent *Sophora* species (Fabaceae). New Zealand J. Bot. 36(2): 295-301 Anatomy and morphology.
- Castroviejo S., Talavera S. 1998. Adenocarpus gibbsianus Castrov. et Talavera (Leguminosae), sp. nov. del sur de Espana. (Adenocarpus gibbsianus Castrov. et Talavera (Leguminosae), sp. nov., from southern Spain.) An. Jard. Bot. Madrid 56(1): 176-178
- Cavanagh, A.K. 1997. The germination of Acacias: a bibliography. Eighth supplement. Bull. Int. Group Study Mimos. no.20: 56-60
- Cenci, C.A., Mizianty, M. 1997. Some morphometric and chemotaxonomic features in the taxonomy of *Onobrychis* (Fabaceae) from Poland. Fragm. Flor. Geobot. 42(2): 401-404 Chemotaxonomy.
- CHANDLER G.T., CRISP M.D. 1998. Morphometric and phylogenetic analysis of the *Daviesia ulicifolia* complex (Fabaceae, Mirbelieae). Pl. Syst. Evol. 209(1-2): 93-122 Illus Icones, Maps, Chromosome numbers.
- Chen, T., Li, Z. 1997. *Rothia*, a newly recorded genus of Leguminosae from China. J. Trop. Subtrop. Bot. 5(4): 8-10 illus. Chinese Icones, Anatomy and morphology, Keys.
- Chikuni, A 1997. Pollen morphology in *Brachystegia* Benth. (Leguminosae: Caesalpinioideae). Oxford Pl. Syst. no.5: 6-7 illus. Icones, Palynology.
- CHOI, B.H., Kim, J.H. 1997. ITS sequences and speciation on Far Eastern Indigofera (Leguminosae). J. Pl. Res. 110(1099): 339-346

- COLES S., MAXTED N., van der Maesen LJG 1998. Identification aids for *Cicer* (Leguminosae, Cicereae) taxa. Edinburgh J. Bot. 55(2): 243-265 Anatomy and morphology, Keys.
- Crawford D.J., Esselman E.J., Windus J.L., Pabin C.S. 1998. Genetic variation in running buffalo clover (*Trifolium stoloniferum*: Fabaceae) using random amplified polymorphic DNA markers (RAPDs). Ann. Missouri Bot. Gard. 85(1): 81-89 Maps.
- Cubas, P., Pardo, C. 1997. Correlations between chromosomal and morphological characters in subspecies of *Ulex europaeus* L. (Genisteae, Leguminosae) from the north-west of the Iberian Peninsula. Bot. J. Linn. Soc. 125(3): 229-243 illus. Maps, Chromosome numbers.
- DAS A.B., Basak U.C., Das P. 1998. Karyotype analysis and estimation of nuclear DNA content in six species of *Acacia* (Fabaceae). Iranian J. Bot. 7(2): 165-177 Illus
- Dayanandan, S., Bawa, K.S., Kesseli, R. 1997. Conservation of microsatellites among tropical trees (Leguminosae). Amer. J. Bot. 84(12): 1658-1663
- de Lajudie, P., Willems, A., Nick, G., MOREIRA, F.M.S., Molouba, F., Hoste, B., Torck, U., Neyra, M., Collins, M.D., Lindstrom, K., Dreyfus, B., Giillis, M. 1998. Characterization of tropical tree rhizobia and description of mesorhizobium plurifarium sp.nov. International Journal of Systematic Bacteriology 48, 369-382.
- de Nysschen A, Van WYK B.E., van Heerden F.R. 1998. Seed flavonoids of the Podalyrieae and Liparieae (Fabaceae). Pl. Syst. Evol. 212(1-2): 1-11 Chromosome numbers, Chemotaxonomy.
- Devesa, Alcaraz, J.A., Lopez, Gonzalez, G. 1997. Notas taxonomicas y nomenclaturales sobre el genero *Ononis* L. (Leguminosae) la Peninsula Iberica e Islas Baleares. (Taxonomic and nomenclatural notes on the genus *Ononis* L. (Leguminosae) in the Iberian Peninsula and Balearic Islands.) An. Jard. Bot. Madrid 55(2): 245-260 illus. Icones, Keys.
- Dixon, D.J. 1997. A taxonomic revision of the genus *Austrosteenisia* R. Geesink (Fabaceae: Millettieae). Austrobaileya 5(1): 79-91 illus.Icones, Maps, Anatomy and morphology, Keys.
- DREWES S.I. 1998. Nectarios en Macroptilium erythroloma (Fabaceae). Nectaries in *Macroptilium erythroloma*. An. Inst. Biol. Univ. Nac. Auton. Mex., Bot. 69(1): 23-35
- Du Puy, D. 1997. The Leguminosae of Madagascar. Curtis's Bot. Mag. 14(4): 231-241 illus. Icones, Anatomy and morphology.
- Duman, H., Baser, KHC, Malyer, H. 1997. A new species of *Chamaecytisus* Link. (Leguminosae/Fabaceae) from S.W.Anatolia. Karaca Arbor. Mag. 4(1): 13-18 illus., col. illus. Anatomy and morphology.
- Duman, H., Ekim, T. 1997. Astragalus serpentinicola (A. sect. Sisyrophorus, Leguminosae), a new species from S.W. Turkey. Willdenowia 27(1-2): 181-184 illus. Icones, Maps, Anatomy and morphology, Keys.
- EDWARDS, T.J. 1997. Notes on Argyrolobium (Fabaceae) in South Africa. S. Afr. J. Bot. 63(5): 271-275 illus. Icones, Maps, Anatomy and morphology.
- El, Ghazali, G.E.B., Satti, A.M., Tsuji, SI 1997. Intra-specific pollen polymorphism in *Mimosa pigra* (Mimosaceae). Grana 36(5): 279-283 illus. Palynology, Keys.
- Endo Y., OHASHI H. 1998. Diagnostic characters and distribution of *Indigofera pedicellata* Wight et. Arn. (Leguminosae. J. Jap. Bot. 73(2): 67-75 Maps.
- Endo Y., OHASHI H. 1998. Morphological and anatomical features of nectary on calyx-tooth of the genus *Vicia* (Leguminosae) and their systematic utility. J. Jap. Bot. 73(2): 92-101 Illus.
- Endo Y., OHASHI H. 1998. The features of cotyledon areoles in Leguminosae and their systematic utility. Amer. J. Bot. 85(6): 753-759 Illus. Icones, Anatomy and morphology.
- Ertekin, A.S., Orcan, N., Misirdali, H. 1997. A new *Lathyrus* L. for the flora of Turkey: floristic note. Israel J. Pl. Sci. 45(4): 339-341 illus. Icones, Anatomy and morphology.
- FANTZ, P.R. 1997. Lectotypification of Clitoria australis (Fabaceae). Sida, Contrib. Bot. 17(3): 635-636
- Fernandes A, Nunes E.P. 1998. Uma nova especie de Sesbania (Fabaceae). Albertoa 4(26): 337-339 Illus. Portuguese. Icones, Anatomy and morphology
- Fortunato R.H., Greuter W. 1998. Neotypification of the name Clitoria lactescens (Leguminosae). Taxon 47(3): 703-704
- Fortunato, R.H., Palese, R. 1997. Notulae ad Floram paraquaiensem, 62. Una nueva combinacion el genero *Lonchocarpus* Kunth (Leguminosae-Millettieae): *Lonchocarpus fluvialis* (Lindm.) Fortunato et Palese. Candollea 52(2): 509-511 1997.
- Fuentes, E., Planchuelo, A.M. 1997. Sterol and fatty acid component in lupin seeds. Zeits. Naturforschung 52c: 9-14.
- Ganapaty, S., Pushpalatha V., Babu GJ, Naidu KC, Waterman PG 1998. Flavonoids from *Millettia peguensis* Ali (Fabaceae). Biochem. Syst. Ecol. 26(1): 125-126 Chemotaxonomy.
- GAO, X.F. 1998. (A new taxon and new record of Leguminosae in China.) Acta Bot. Yunnanica 20(3): 269-270 Desmodium griffithianum var. leiocarpum var. nov.
- Garba, M., PASQUET, R.S. 1998. Isozyme diversity in *Vigna vexillata* (L.) A. Rich (Fabaceae) complex. S. Afr. J. Bot. 64(3): 163-175 Chemotaxonomy.
- Garba, M., PASQUET RS 1998. Isozyme polymorphism within section reticulatae of genus *Vigna* (tribe Phaseoleae: Fabaceae). Biochem. Syst. Ecol. 26(3): 297-308 Chemotaxonomy.

11

- Garcia Casanova J., Romero Manrique P., Fernandez Lopez AB, Samarin Bello C. 1998. Adiciones corologicas: nuevas poblaciones de *Anagyris latifolia* Brouss. ex Willd. (Fabaceae) en la Gomera (Islas Canarias). (Chorological additions: new populations of *Anagyris latifolia* Brouss. ex Willd. (Fabaceae) in La Gomera (Canary Islands).) Bot. Macaronesica no.23: 307-311 (1996 publ.1998) Maps.
- Garcia Mateos, R., Soto Hernandez M., Kelly D. 1998. Alkaloids from six *Erythrina* species endemic to Mexico. Biochem. Syst. Ecol. 26(5): 545-551
- Garcia, F.C.P., Monteiro, R. 1997. Leguminosae: Caesalpinioideae de uma floresta pluvial de planicie costeira em Picinguaba, Municipio de Ubatuba, Sao Paulo, Brasil. (Leguminosae: Caesalpinioideae of a coastal plain forest of Picinguaba, Ubatuba, Sao Paulo State, Brazil.) Bol. Bot. Univ. Sao Paulo 16: 37-47 illus. Icones, Maps, Anatomy and morphology, keys.
- Germishuizen G. 1998. Fabaceae: a new species of *Pearsonia* from Mpumalanga, South Africa. Bothalia 28(1): 57-58 Illus. Icones, Maps, Anatomy and morphology.
- Germishuizen G. 1998. Fabaceae: a new species of *Rhynchosia* from South Africa. Bothalia 28(1): 58-60. Illus. Icones, Maps, Anatomy and morphology.
- Gibbs, P., Sassaki, R. 1998. Reproductive biology of *Dalbergia miscolobium* Benth. (Leguminosae-Papilionoideae) in S.E. Brazil: the effects of pistillate sorting on fruit-set. Ann. Bot. (UK) 81(6): 735-740 Illus. Icones, Reproductive biology.
- Gillies, A.C.M, Abbott R.J. 1998. Evaluation of random amplified polymorphic DNA for species identification and phylogenetic analysis in *Stylosanthes* (Fabaceae). Pl. Syst. Evol 211(3-4): 201-216
- GOMEZ-SOSA, E. 1997. Astragalus johnstoniii nov. sp. (Leguminosae) y sus relaciones con el complejo A. verticillatus (Phil.) Reiche. Gayana 54(1): 31-37.
- GOMEZ-SOSA, E. 1997. A new *Astragalus* (Leguminosae) from Argentina, notable for placentation of its seeds. Brittonia 49(4): 537-541 illus. Icones, Anatomy and morphology.
- GOMEZ-SOSA, E. 1997. Nueva combinacion *Lonchocarpus* (Leguminosae). (A new combination in *Lonchocarpus* (Leguminosae).) Hickenia 2(49-54): 247-248
- GRANT, W.F. 1997. Karyotypes and idiograms of some western North American species of *Lotus* (Fabaceae). Aliso 16(1): 73-80 illus. Chromosome numbers.
- Greilhuber, J., Obermayer, R. 1998. Genome size variation in *Cajanus cajan* (Fabaceae): a reconsideration. Pl. Syst. Evol. 212(1-2): 135-141
- GRIMES, J.W. 1997. A revision of *Cullen* (Leguminosae: Papilionoideae). Austral. Syst. Bot. 10(4): 565-648 illus. Icones, Maps, Anatomy and morphology, Keys.
- Guleryuz, G., Arslan, H. 1998. Astragalus sibthorpianus Boiss. Karaca Arbor. Mag. 4(3): 143 col. Illus. Icones, Maps.
- HARRIS, S.A., FAGG, C.W, Barnes, R.D. 1997. Isozyme variation in *Faidherbia albida* (Leguminosae, Mimosoideae). Pl. Syst. Evol. 207(1-2): 119-132 Maps.
- Heenan, P.B. 1998. An emended circumscription of *Carmichaelia*, with new combinations, a key, and notes on hybrids. New Zealand J. Bot. 36(1): 53-63 Illus. Icones, Anatomy and morphology, keys.
- Heenan, P.B. 1998. *Montigena* (Fabaceae), a new genus endemic to New Zealand. New Zealand J. Bot. 36(1): 41-51 Illus. Icones, Maps, Chromosome numbers, Anatomy and morphology.
- Heenan, P.B. 1998. Phylogenetic analysis of the *Carmichaelia* complex, *Clianthus*, and *Swainsona* (Fabaceae), from Australia and New Zealand J. Bot. 36(1): 21-40 Illus. Icones, Anatomy and morphology.
- Heenan, P.B. 1998. Reinstatement of *Sophora longicarinata* (Fabaceae-Sophoreae) from northern South Island, New Zealand, and typification of *S. microphylla*. New Zealand J. Bot. 36(3): 369-379. Illus. Icones, Maps, Anatomy and morphology.
- Heenan, P.B. 1998. The pollination system and stigmatic cuticle of *Clianthus puniceus* (Fabaceae). New Zealand J. Bot. 36(2): 311-314 Illus. Icones, Anatomy and morphology, Reproductive biology.
- Heenan, P.B. 1997. Wood anatomy of the *Carmichaelia* (Fabaceae) complex in New Zealand. New Zealand J. Bot. 35(3): 395-415 illus. Icones, Anatomy and morphology.
- Herman, M., Heller, J., eds 1997. Andean roots and tubers: ahipa, arracacha, maca and yacon. Rome: International Plant Genetic Resources Institute, 1997 256p. illus., col. illus. SERIES (Promoting the conservation and use of underutilized and neglected crops; 21) Icones, Maps, Chromosome numbers. Includes sections on taxonomy, distribution, botanical descriptions.
- HERNANDEZ, H.M., Hanan Alipi, A.M. 1998. Zapoteca quichoi (Leguminosae, Mimosoideae), a new species from southeastern Mexico. Brittonia 50(2): 211-213 Illus. Icones, Anatomy and morphology.
- HOC, PS, Garcia, M.T.A. 1998. Floral biology and reproductive system of *Phaseolus augusti* (Fabaceae). Beitr. Biol. Pfl. 70(1): 121-140 (1997 publ. 1998) Illus. Icones, Reproductive biology.
- HOC, P.S., Garcia, M.T.A., Palacios, RA 1997. Functional andromonoecy in *Prosopis alba* Griseb. (Mimosaceae). The effect of abiotic and biotic factors on the reproductive system. 69(2): 191-218 (1995-1996 publ. 1997) illus. Icones, Reproductive biology.
- Holland, A.E. 1997. Rothia indica subsp. australis A.E. Holland (Fabaceae: Crotalarieae), a new subspecies occurring in Australia. Austrobaileya 5(1): 93-96 illus. Icones, Anatomy and morphology, Keys.

- Honfi, A.I., Davina, J.R. 1997. El cariotipo de *Anadenanthera colubrina* var. *cebil* y de *Parapiptadenia rigida* (Leguminosae: Mimosoideae). Bonplandia 9(3-4): 277-280 Chromosome numbers.
- Hopkins, H.C.F. 1998. Bat-pollination and taxonomy in *Parkia* (Leguminosae): Mimosoideae) Hopkins HCF, Huxley, C.R., Pannell, C.M., Prance, G.T., White, F. The biological monograph: the importance of field studies and functional syndromes for taxonomy and evolution of tropical plants. Kew: Royal Botanic Gardens, Kew, 31-55 Illus. Icones, Reproductive biology, Keys.
- HUGHES, C.E, HARRIS, S.A. 1998. A second spontaneous hybrid in the genus *Leucaena* (Leguminosae, Mimosoideae). Pl. Syst. Evol. 212(1-2): 53-77 Illus. Icones, Maps, Chromosome numbers, Reproductive biology.
- HUGHES, C. 1997. Species delimitation, and new taxa and combinations in *Leucaena* (Leguminosae). Contrib. Univ. Mich. Herb. 21: 277-290 illus. Icones, Anatomy and morphology.
- Igic, R., Vuckovic, M., Stojanovic, S., Budak, V. 1997. Chorological, coenological and ecological characteristics of *Trifolium* diffusum Ehrh. in Vojvodina. Thaiszia 7(2): 183-189 -
- JAASKA, V. 1997. Isoenzyme diversity and phylogenetic affinities in *Vicia* subgenus *Vicia*. Genet. Resourc. Crop Evol. 44(6): 557-574
- Jarvie, J.K. 1998. A new species of Bauhinia (Leguminosae: Caesalpinioideae) from Borneo. Kew Bull. 53(2): 495-496 Keys.
- Jones, S.D., Reznicek, AA. 1997. Lathyrus aphaca (Fabaceae), previously unreported for Texas. Phytologia 82(1): 1-2
- Kahindi, J.P.H., Woomer, P., George, T., Moreira, F.M.S., Karanja, N., Giller, E.J. Agricultural intensification, soil biodiversity and ecosystem function in the tropics: the role of nitrogen-fixing bacteria. Applied soil ecology, 6(1), 55-76
- Kamperdick, C., Nguyen Minh Phuong, Tran Van Sung, Adam, G. 1998. Flavones and isoflavones from *Millettia ichthyochtona*. Phytochemistry 48(3): 577-579 Chemotaxonomy.
- Karam, M.F. 1997. Scanning electron microscope studies of seed characters in Trifolium L. (Fabaceae). Phytomorphology 47(1): 51-58 illus. Icones, Anatomy and morphology, Reproductive biology.
- Kass, E., Wink, M. 1997. Molecular phylogeny and phylogeography of *Lupinus* (Leguminosae) inferred from nucleotide sequences of the rbcL gene and ITS 1 + 2 regions of rDNA. Pl. Syst. Evol. 208(3-4): 139-167 Chromosome numbers.
- Kaur, H. 1997. Morphology and spermoderm pattern in some species of *Albizia* Durazz. (Mimosoideae: Leguminosae). Phytomorphology 47(2): 195-201 illus.Icones, Anatomy and morphology.
- Kawashty, S.A., Abdalla, M.F., Gamal El Din, E.M., Saleh N.A.M. 1998. The chemosystematics of Egyptian *Trigonella* species. Biochem. Syst. Ecol. 26(8): 851-856 Chemotaxonomy.
- Khandelwal, V.K., Sen, D.N. 1998. Amino acids in seeds and seedlings of *P. cineraria and P. juliflora*. In Tewari, J.C., Pasiecznik, N.M., Harsh, L.N., Harris, P.J., eds, *Prosopis* species in the arid and semi-arid zones of India: proceedings of a conference held at the Central Arid Zone Research Institute, Jodhpur, Rajasthan, India, November 21-23, 1993. Jodhpur: Prosopis Society of India; Coventry: Henry Doubleday Research Association, 1998. pp.31-32. Chemotaxonomy.
- Knight, G. 1998. Bird's-foot-trefoils winning ways. BSBI News no.78: 46-47
- Knudsen, J.T., KLITGAARD, B.B. 1998. Floral scent and pollination in *Browneopsis disepala* (Leguminosae: Caesalpinioideae) in western Ecuador. Brittonia 50(2): 174-182 Illus. Icones, Chemotaxonomy, Reproductive biology.
- Kodela, P.G. 1998. Notes on types of some *Acacia* species (Fabaceae, Mimosoideae) at the National Herbarium of New South Wales (NSW). Telopea 7(4): 419-423
- Kodela, P.G., TINDALE, M.D. 1998. The reduction of *Acacia burkittii* to *Acacia acuminata* subsp. burkittii (*Acacia* sect. Juliflorae: Fabaceae, Mimosoideae). Telopea 7(4): 415-417 Keys.
- Koyama, H. 1998. Type collection in the Herbarium of National Science Museum, Tokyo (TNS): Leguminosae. Bull. Nation. Sci. Mus., (Tokyo) 24(1): 37-41
- Kramina, T.E., Sokoloff, D.D. 1997. Lotus roudairei Bonnet and taxonomic relationships between African and North American species of the tribe Loteae (Papilionaceae). Adansonia 19(2): 321-328 illus. French, Icones, Anatomy and morphology.
- LABAT, J.N., Du Puy D.J. 1998. Sylvichadsia, a new genus of Leguminosae-Papilionoideae-Millettieae endemic to Madagascar. Adansonia 20(1): 163-171 Illus. Icones, Maps, Anatomy and morphology, Keys.
- LABAT, J.N. (1996). Biogeographie, endémisme et origine des Leguminosae. Papilionoideae de Mudagascar. In. W.R. Lrenzo ed., Biogeographie de Madaguscas, ORSTOM, Paris: 95-108. In French. English Abstract.
- Ladero, M., Fuertes, E., Amor, A., Perez, Chiscano, JL 1997. Novedades y comentarios sobre flora Lusoextremadurense. (News and remarks on the Lusoextremadurense flora (SW Spain).) Stud. Bot. (Salamanca) 16: 151-154 (1997 publ. 1998)
- Lai, M., Sceppa, J., Ballenger, JA, Doyle, JJ, Wunderlin, RP 1997. Polymorphism for the presence of the rpL2 intron in chloroplast genomes of Bauhinia (Leguminosae). Syst. Bot. 22(3): 519-528
- Lamarque, A.L., Guzman, C.A. 1997. Seed chemical variation in *Prosopis chilensis* from Argentina. Genet. Resourc. Crop Evol. 44(6): 495-498 Chemotaxonomy.
- Landolt, E. 1997. Beitrage zur Flora der Stadt Zurich: 5. Dicotyledonen 3 (Leguminosae bis Araliaceae). (Contributions to the flora of the city of Zurich: 5. Dicotyledones 3 (Leguminosae to Araliaceae).) Bot. Helvetica 107(2): 171-194 Maps, Chromosome numbers, Keys.

- Lang, P.J. 1998. Pultenaea kraehenbuehlii, a new species endemic to the northern Mount Lofty Ranges, South Australia. J. Adelaide Bot. Gard, 18(1): 25-32 Illus. Icones, Maps, Anatomy and morphology.
- LARSEN, K., LARSEN, S.S. 1997. Validation of the variety name *Bauhinia glabrifolia* (Benth.) Baker var. *maritima* K. and Larsen, S.S. Thai Forest Bull., Bot. no.25: 14 -
- LAVIN, M., Eshbaugh, E., Hu, J.M., Mathews, S., Sharrock, R.A. 1998. Monophyletic subgroups of the tribe Millettieae (Leguminosae) as revealed by phytochrome nucleotide sequence data. Amer. J. Bot. 85(3): 412-433
- LAVIN, M., Marriott, H. 1997. Astragalus molybdenus s.l. (Leguminosae): higher taxonomic relationships and identity of constituent species. Syst. Bot. 22(2): 199-217 illus. Icones, Chromosome numbers, Anatomy and morphology, Keys.
- Leebens Mack, J., Milligan, B.G. 1998. Pollination bilogy in hybridizing *Baptisia* (Fabaceae) populations. Amer. J. Bot. 85(4): 500-507 Reproductive biology.
- LEWIS, G.P. 1998. Caesalpinia: a revision of the Poincianella-Erythrostemon group. Kew: Royal Botanic Gardens, Kew, 1998. 233p. Illus., Icones, Maps, Chromosome numbers, Anatomy and morphology, Keys.
- LEWIS, G., Foster, C. 1997. Plant portraits: 325. Zollernia splendens. Leguminosae: Papilionoideae. Curtis's Bot. Mag. 14(4): 194-197 illus., col. illus. Icones, Anatomy and morphology.
- Li S., Chang, Z., Li, B., Xu, L. 1998. (The cytogeography study of one pairing species of *Calophaca* Fisch. in west and east sides of Mongolia-Xinjiang desert.) Acta Bot. Bor. Occid. Sin. 18(2): 246-251 Chinese, Summary (Eng.) Chromosome numbers. Illus.
- Li, S,S,. Liu, X., Deng, J.Z., Zhao, S.X. 1997. Determination of total flavonoid in 3 wild species of *Pueraria* from West-Hubei by UV-spectrophotometry J. Pl. Resourc. Environ. 6(3): 61-62 Chemotaxonomy.
- Liu, C.J., Musial, J.M. 1997. *Stylosanthes* sp. aff. *S. scabra*: a putative diploid progenitor of *Stylosanthes scabra* (Fabaceae). Pl. Syst. Evol. 208(1-2): 99-105 Chromosome numbers.
- Liu, X.J., Ding, M.M., Zhang, G.X., Zhao, L., Li, R.J. 1997. (Studies on flower biology and breeding system of *Vicia* L. in northeast China.) Bull. Bot. Res. North-East. Forest. Univ. 17(4): 421-430 illus.Reproductive biology.
- Loo, AHB, Tan, HTW 1997. The angiosperm flora of Singapore: part 6. Caesalpiniaceae. Gard. Bull. Singapore 49(1): 55-106 (1997 publ. 1998) illus. Icones, Anatomy and morphology, Keys.
- LUCKOW, M. 1997. Generic relationships in the *Dichrostachys* group Leguminosae: Mimosoideae):evidence from chloroplast DNA restriction sites and morphology. Syst. Bot. 22(2): 189-198
- MAASSOUMI, A.A. 1998. New findings on the genus Astragalus in Iran. Iranian J. Bot. 7(2): 221-226
- MAASSOUMI, A.A., Ranjbar, M. 1998. Revision of the genus *Astragalus* L. sect. Leucocercis Bunge (Leguminosae) from Iran. Iranian J. Bot. 7(2): 239-248 Anatomy and morphology, Keys.
- MACKINDER, B., Staniforth, M. 1997. Plant portraits: 330. Sophora toromiro. Leguminosae: Papilionoideae. Curtis's Bot. Mag. 14(4): 221-226 illus., col. illus. Icones, Chromosome numbers, Anatomy and morphology.
- Malla, L.M., Gallego, L., Villamil, S., Mujica, M.B. 1998. Arquitectura foliar de tres generos monotopicos sudamericanos de Fabaceae. (Leaf architecture of three South American monotypic genera of Fabaceae.) Darwiniana 35: 1-8 Icones, Anatomy and morphology.
- Marin, P.D., Boza, P., Merkulov, L.J., Krstic, B., Petkovic, B., Veljic, M., Pajevic, S. 1998. Seed sculpturing of selected European *Vicia* L. species (Fabaceae) and their taxonomical evaluation. Seed Sci. Techn. 26(1): 17-32 Illus. Icones, Anatomy and morphology.
- Martinez, Quesada, E. 1997. Taxonomic significance of foliar dermotypes and floral trichomes in some Cuban taxa of *Indigofera* L. (Fabaceae-Faboideae). Polibotanica no. 6: 1-18 (1997 publ. 1998) illus. Anatomy and morphology, Keys.
- Maslin, B.R., Stirton, C.H. 1997. Generic and infrageneric classification in *Acacia* (Leguminosae: Mimosoideae): a list of critical species on which to build a comparative data set. Bull. Int. Group Study Mimos. no.20: 22-45
- Medina Lemos, R. 1997. Flora del valle de Tehuacan-Cuicatlan: fasciculo 13. Fabaceae Lindl., tribu Psoraleeae (Benth.) Rydb. Mexico D.F.: Universidad Nacional Autonoma de Mexico, 1997 13p. illus.Icones, Keys.
- Mendes, I. da C.A., Paviani, T.I. 1997. Morfo-anatomia comparada das folhas do par vicariante *Plathymenia foliolosa* Benth. e *Plathymenia reticulata* Benth. (Leguminosae: Mimosoideae). (Comparative morpho-anatomy of leaves from the vicariant pair *Plathymenia foliolosa* Benth. and *Plathymenia reticulata* Benth. (Leguminosae: Mimosoideae).) 20(2): 185-195 illus. Icones, Anatomy and morphology.
- MERCADO RUARO, P., DELGADO SALINAS, A. 1998. Karyotypic studies on species of *Phaseolus* (Fabaceae: Phaseolinae). Amer. J. Bot. 85(1): 1-9 Illus. Chromosome numbers.
- MOREIRA, F.M.S. 1997. Nursery growth and nodulation of forty-nine woody legume species native from amazonia. R. bras. Ci. Solo, 21: 581-590
- MOREIRA; F.M.S., Haukka, K., Young, J.P.W. 1998. Biodiversity of rhizobia isolated from a wide range of forest legumes in Brazil. Molecular Ecology 7, 889-895.

- Moshe, D., van der Bank, H., van der Bank, M., Van WYK, B. 1998. Lack of genetic differentiation between 19 populations from seven taxa of *Sutherlandia* tribe: Galegeae, Fabaceae. Biochem. Syst. Ecol. 26(6): 595-609 Maps, Chromosome numbers, Chemotaxonomy.
- MOSJIDIS, J.A. 1997. Kummerowia. pp. 167-170. In: Faridah Hanum, I., and L.J.G. van der Maesen (eds.). Plant Resources of South-East Asia No. 11, Auxiliary plants. Backhuys Publishers, Leiden, The Netherlands. 389 pp.
- MOSJIDIS, J.A. 1997. Lespedeza cuneata pp. 170-173. In: Faridah Hanum, I., and L.J.G. van der Maesen (eds.). Plant Resources of Sout-East Asia No. 11, Auxiliary plants. Backhuys Publishers, Leiden, The Netherlands. 389 pp.
- Moylan, E. 1997. Undergraduate project. Oxford Pl. Syst. no.5: 13-14 illus. Investigation on the validity of Lathyrus pratensis var. speciosa.
- MUNYENYEMBE, M.P, BISBY, F.A. 1997. The transfer of *Dolichos junodii* to Nesphostylis (Leguminosae). Kew Bull. 52(3): 689-692 illus. Anatomy and morphology, Palynology.
- Nandini, A.V., MURRAY, B.G., O'Brien, I.E.W., Hammett, K.R.W. 1997. Intra- and interspecific variation in genome size in *Lathyrus* (Leguminosae). Bot. J. Linn. Soc. 125(4): 359-366
- NEILL, D.A. 1998. *Ecuadendron* (Fabaceae: Caesalpinioideae: Detarieae): a new arborescent genus from western Ecuador. Novon 8(1): 45-49. Illus. Icones, Anatomy and morphology, Palynology.
- NEMOTO, T., OHASHI, H. 1997. Morphology and variation of cleistogamous flower in *Lespedeza tomentosa* (Thunb.) Siebold ex Maxim. (Leguminosae) in relation to variation in inflorescence form. J. Jap. Bot. 72(6): 315-328 illus. Icones, Anatomy and morphology.
- NIYOMDHAM, C., Pham Hoang, Ho, Dy Phon, P., VIDAL, J.E. 1997. Flore du Cambodge du Laos et du Vietnam: no.29. Leguminosae-Papilionoideae, Dalbergieae. Paris: Museum National d'Histoire Naturelle, 1997 67p. illus. French
- OHASHI, H., NEMOTO, T. 1998. A new species of *Desmodium* (Leguminosae) from China. J. Jap. Bot. 73(2): 84-88. Illus. Icones, Anatomy and morphology.
- OHASHI, H. 1997. Taxonomic status of *Phyllodium elegans* (Lour.) Desv. var. *javanicum* Schindl. (Leguminosae: Papilionoideae: Desmodieae). J. Jap. Bot. 72(6): 347-351 illus. Japanese Icones, Maps, Keys.
- Ohmiya, T. 1998. Pericarp anatomy of *Wisteria floribunda*. Bull. Bot. Gard. Toyama no.3: 25-33. Illus. Anatomy and morphology.
- Ortega, Olivencia, A., Devesa, J.A. 1997. Seed set and germination in some wild species of *Vicia* from S.W. Europe (Spain). Nordic J. Bot. 17(6): 639-648 Reproductive biology.
- Pasquet, R.S. 1997. A new subspecies of Vigna unguiculata (Leguminosae: Papilionoideae). Kew Bull. 52(4): 840
- Pedley, L. 1997. Notes on *Caesalpinia* subg. *Mezoneuron* (Leguminosae: Caesalpinioideae) in Australia. Austrobaileya 5(1): 97-102 illus. Icones, Anatomy and morphology, Keys.
- Peralta, de, Andres, J., Bascones, Carretero, J.C. 1997. Datos sobre los brezales con *Genista anglica* L. de las sierras meridionales de Alava y Navarra. (About heaths with Genista anglica from the southern mountains of Alava and Navarra.) Itinera Geobot. 1997.
- Perry, J.E., Ware, D.M.E., McKenney, Mueller, A. 1998. Aeschynomene indica L. (Fabaceae) in Virginia. Castanea 63(2): 191-194 Anatomy and morphology.
- Peterson, D.J., Prasad, R. 1998. The biology of Canadian weeds. 109. Cytisus scoparius (L.) Link. Canad. J. Pl. Sci. 78(3): 497-504 Illus. Icones, Maps, Chromosome numbers, Reproductive biology.
- Playford, J., Appels, R., Baum, B. 1997. The 5SDNA units of Acacia species. Bull. Int. Group Study Mimos. no.20: 19-21
- PODLECH, D. 1998. Typification of Astragalus species: 2. Species mainly of the herbaria of Paris (P.) and Geneva (G.). Sendtnera 5: 247-263
- PODLECH, D., Aytac Z. 1998. Two new species of Astragalus L. sect. Dissitiflori DC. (Fabaceae) from Turkey. Sendtnera 5: 265-268 Illus.lcones, Anatomy and morphology.
- Polhill, R. 1997. Introduction to the Leguminosae: legumes in streets and gardens. Curtis's Bot. Mag. 14(4): 176-183
- Polhill, R. 1997. Plant portraits: 328. Crotalaria quinquefolia. Leguminosae: Papilionoideae. Curtis's Bot. Mag. 14(4): 208-212 illus., col. illus. Icones, Anatomy and morphology.
- PRZYBYLSKA, J. 1997. Electrophoretic seed albumin patterns in *Vicia* species of sectt. Hypechusa and Peregrinae (Fabaceae). Pl. Syst. Evol. 208(3-4): 239-248 Chemotaxonomy.
- Qian, G.Z., Liu, L.F., Wang, X.Z. 1997. (New taxonomic material of the genus Oxytropis (Pall.) DC.) Bull. Bot. Res. North-East. Forest. Univ. 17(1): 58-59 Chinese
- Qian, Z., Chen, J. 1997. (Two new species of Astragalus from Yunnan.) Acta Bot. Yunnanica 19(3): 236-238 illus. Chinese Icones, Anatomy and morphology.
- QUEIROZ, L.P., de 1997. Novas combinacoes em *Moldenhawera* Schrad. e *Cratylia* Mart. ex Benth. e uma nova variedade de *Zornia brasiliensis* Vog. (Leguminosae). (New combinations in *Moldenhawera* Schrad. and *Cratylia* Mart. ex Benth., and a new variety of Zornia brasiliensis Vog. (Leguminosae).) Bol. Bot. Univ. Sao Paulo 16: 107-109

 Portuguese
- Ranjbar, M., MAASSOUMI, A.A. 1998. New species and new records of the genus *Astragalus* (Leguminosae) from Iran. Iranian J. Bot. 7(2): 235-238 Illus.
- RICO ARCE, M., de, L., Cooke, D. 1997. Plant portraits: 326. Abarema idiopoda. Leguminosae: Mimosoideae. Curtis's Bot. Mag. 14(4): 198-202 col. illus.

- RIDDER NUMAN, J. 1998. The continuing story of *Spatholobus* (Leguminosae: Papilionoideae) and its allies. In Dransfield, J., Coode, M.J.E., Simpson, D.A., eds. Plant diversity in Malesia III: proceedings of the third international Flora Malesiana symposium 1995. Kew: pp 205-217.
- Romero Zarco, C. 1998. Lectotipificacion de Vicia amphicarpa L., V. benghalensis L. y V. sativa var. nigra L. (Leguminosae). (Lectotipification of Vicia amphicarpa L., V. benghalensis L. and V. sativa var. nigra L. (Leguminosae).) An. Jard. Bot. Madrid 56(1): 178-179
- Romero Zarco, C. 1998. Vicia leucantha Biv. (Leguminosae), en Baleares. (Vicia leucantha Biv. (Leguminosae) in the Balearic Islands.) An. Jard. Bot. Madrid 56(1): 180-181 Anatomy and morphology.
- Romero, Zarco, C. 1997. Tipificacion de Vicia parviflora Cav. (Fabaceae). An. Jard. Bot. Madrid 55(2): 491-492
- Romero, Zarco, C. 1997. Typification of two species of *Vicia* L. (Fabaceae) described by Boissier in N.Africa. Flora Medit. 7: 107-113 illus. Icones.
- ROSS, J.H. 1998. Notes on Western Australian *Bossiaea* species (Fabaceae): 3. Muelleria 11: 5-11 Illus. Icones, Maps, Anatomy and morphology.
- Rzedowski, J., Calderon, de, Rzedowski, G. 1997. Flora del Bajio y regiones adyacentes: fasciculo 51. Familia Leguminosae. Patzcuaro, Mexico: Instituto de Ecologia, 1997 111p. illus. Icones, Maps, Anatomy and morphology, Keys.
- Sahai, K., Kaur, H., Pal, A. 1997. Macro, and micromorphological seed characteristics of some *Cassia* species and their taxonomic significance. Phytomorphology 47(3): 273-279 illus. Icones, Anatomy and morphology.
- SALMANOWICZ, B.P., PRZYBYLSKA, J. 1997. Comparative HPLC analysis of seed albumins from *Vicia faba* and *V. kalakhensis* (Fabaceae). Pl. Syst. Evol. 208(1-2): 1-9 -
- Santamour, F.S., Riedel, L.G.H. 1997. A new name for *Sophora japonica*. J. Arboricult. (USA) 23(4): 166-167 Chromosomē numbers.
- SCHRIRE, B.D. 1997. Legume activities at Kew. Curtis's Bot. Mag. 14(4): 184-193
- SCHRIRE, B.D., Nichols, G., Sparrow, M., Staniforth, M. 1997. Plant portraits: 329. *Indigofera jucunda*. Leguminosae: Papilionoideae. Curtis's Bot. Mag. 14(4): 213-220 illus., col. illus. Icones, Anatomy and morphology.
- SCHRIRE, B.D., Sims, JR 1997. A re-evaluation of pollen morphology and taxonomy in the tribe Indigofereae (Leguminosae: Papilionoideae). Kew Bull. 52(4): 841-878 illus. Icones, Chromosome numbers, Anatomy and morphology, Palynology.
- Schutte, A.L. 1998. A re-evaluation of the generic status of *Amphithalea* and *Coelidium* (Fabaceae). Taxon 47(1): 55-65 Illus. Icones, Anatomy and morphology.
- Schutte, A.L., Van WYK, B.E. 1998. Evolutionary relationships in the Podalyrieae and Liparieae (Fabaceae) based on morphological, cytological, and chemical evidence. Pl. Syst. Evol. 209(1-2): 1-31 Illus. Icones, Chromosome numbers, Anatomy and morphology, Chemotaxonomy, Keys.
- Schutte, A.L., van WYK, B.E. 1998. The tribal position of *Hypocalyptus* Thunberg (Fabaceae). Novon 8(2): 178-182 Chromosome numbers, Anatomy and morphology.
- Scott, R.C., Smith, D.L. 1998. Cotyledon architecture and anatomy in the Acacieae (Leguminosae: Mimosoideae). Bot. J. Linn. Soc. 128(1): 15-44 Illus. Icones, Anatomy and morphology.
- Seok, D.I., CHOI, B.H. 1997. (Taxonomic study on *Vicia unijuga* using principal components analysis.) Korean J. Pl. Taxon. 27(3): 359-368
- Sharma, N.K., Ramesh, B. 1997. Karyotype analysis in faba bean. Ann. Arid Zone 36(4): 363-366 illus.
- She C., Song Y., Liu L. 1998. (Studies on karyotype and G.-banding patterns in *Psophocarpus tetragonolobus* (L.) DC.)J. Wuhan Bot. Res. 16(1): 23-26 Illus. Chinese. Chromosome numbers.
- Silvestre Capelato, M.S.F., Melhem, T.S.A. 1997. Flora polinica da Reserva do Parque Estadual das Fontes do Ipiranga (Sao Paulo, Brasil): familia 81. Leguminosae. Hoehnea 24(1): 115-163 illus. Portuguese Icones, Palynology, Keys.
- SIMPSON, Beryl B. & Bo-Mao, Miao, 1997. The circumscription of *Hoffmannseggia* (Fabaceae, Caesalpinioideae, Caesalpinieae) and its allies using morphological and cpDNA restriction site data. Pl. Syst. Evol. 205: 157–178.
- Singh, R.P., Jishtu, V. 1997. *Colutea nepalensis* Sims.: an important shrub of cold desert region of India.Indian Forester 123(7): 637-642 illus. Anatomy and morphology.
- Smith, P.P., Timberlake, J.R., Van Wyk, A.E. 1998. (1372) Proposal to conserve the name *Colophospermum* against *Hardwickia* (Leguminosae, Caesalpinioideae). Taxon 47(3): 751
- SOKOLOV, D.D. 1997. Sravnitel'no-anatomicheskoe izuchenie plodov predstavitelei roda *Anthyllis* s. str. (Papilionaceae, Loteae). (Comparative study of fruit anatomy in Anthyllis s. str. (Papilionaceae, Loteae). Bot. Zhurn. 82(10): 58-74 illus. Russian

- Somlyay, L. 1997. Flowering plant types in the Hungarian Natural History Museum (BP): 1. Lotus type specimens of Jozsef Ujhelyi (1910-1979). Ann. Hist.-Nat. Mus. Nation. Hung. 89: 63-70 illus.
- Song, C.Q., Zheng, Z.R., Liu, D., HU, Z.B., Sheng, W.Y. 1997. (Pterocarpans and isoflavans from Astragalus membranaceus (Fisch.) Bunge.) Acta Bot. Sin. 39(12): 1169-1171 Chinese. Chemotaxonomy.
- Sonnante, G., PIERGIOVANNI, A.R., Pignone, D. 1997. Distribution of allozyme variation in *Vicia benghalensis* (Leguminosae) suggests the existence of two genepools. Pl. Syst. Evol. 207(1-2): 99-110
- Sornsathapornkul, P., Owens, J.N. 1998. Pollination biology in a tropical Acacia hybrid (A. mangium Willd. x A. auriculiformis A. Cunn. ex Benth.) Ann. Bot. (UK) 81(5): 631-645 Illus. Icones, Anatomy and morphology, Reproductive biology.
- STERGIOS, B., Stergios, P.R. 1997. Contributions to South American Caesalpiniaceae: 3. Campsiandra wurdackiana (Caesalpiniaceae), a new species from the Venezuelan Guayana. BioLlania ed. especial no.6: 527-535 illus. Icones, Anatomy and morphology, Keys.
- Stevenson, P.C., Veitch, N.C. 1998. The distribution of isoflavonoids in *Cicer*. Phytochemistry 48(6): 995-1001 Chemotaxonomy.
- Talavera, S., Gibbs, P. 1997. Cytisus purgans auct. (Leguminosae: Papilionoideae) comprises four distinct species. Bot. J. Linn. Soc. 125(4): 331-342 illus. Icones, Maps, Anatomy and morphology, Keys.
- Tanaka T., Ohyama M., Iinuma M., Shirataki Y., Komatsu M., Burandt CL 1998. Isoflavonoids from Sophora secundiflora, S. arizonica and S. gypsophila. Phytochemistry 48(7): 1187-1193 Chemotaxonomy.
- Tellez, V., O. 1997. Nomenclatural changes in Mexican Dioscoreaceae and Leguminosae. Contrib. Univ. Mich. Herb. 21: 309-313
- Teppner, H. 1998. *Inga feuillei* DC. (Mimosaceae-Ingeae). In Botanischer Garten des Institutes für Botanik der Universität Graz. Samentauschverzeichnis 1998. Graz: Institut für Botanik, Universität Graz pp. 37-45 German, Illus. Chromosome numbers.
- Thothathri, K. and Rugayah, 1997. *Derris microphylla* (Mig.) B.D. Jackson. In Faridah Hanum, I. & van der Maesen, L.J.G. (Editors) Plant Resources of South-east Asia No. 11. Auxiliary Plants. Backhurys Publishers, Leiden, the Netherlands, pp. 115-117.
- Thothathri, K. and Ravikumar, S., 1997. A new species of *Millettia* from Anamalai Hills, Tamil Nadu. Journ. Econ. Tax. Bot. 21 239–242.
- Thulin, M. 1998. A new combination for a Crotalaria (Leguminosae) from Socotra. Kew Bull. 53(2): 460
- Thulin, M. 1997. A new species and a new record of *Tephrosia* (Leguminosae) from Socotra. Nordic J. Bot. 17(4): 349-351 illus. Icones, Anatomy and morphology.
- Troia, A., Conte, L., Cristofolini, G. 1997. Isolation and biodiversity in *Cytisus villosus* Pourret (Fabaceae, Genisteae): enzyme polymorphism in disjunct populations. Pl. Biosystems 131(2): 93-101 -
- TUCKER, S.C. 1998. Floral ontogeny in legume genera *Petalostylis*, *Labichea*, and *Dialium* (Caesalpinioideae: Cassieae), a series in floral reduction. Amer. J. Bot. 85(2): 184-208 Illus. Icones, Anatomy and morphology.
- Turland, N. 1997. (1317) Proposal to reject the name Phaca trifoliata (Leguminosae). Taxon 46(4): 785-786
- TURNER, B.L. 1997. Synoptical study of the *Acacia angustissima* (Mimosaceae) complex. Phytologia 81(1): 10-15 (1996 publ. 1997) Maps, Keys.
- Tybirk, K. 1997. Reproductive biology and evolution of the genus *Acacia*. Bull. Int. Group Study Mimos. no.20: 45-53 Reproductive biology.
- Vela, E. 1998. A propos de *Astragalus tragacantha* L. (syn.: A. massiliensis (Miller) Lam.), espece protegee: station nouvelle dans un biotope meconnu. Monde Pl. 93(461): 24-25 French
- Venora, G., Padulosi, S. 1997. Karyotypic analysis of wild taxa of *Vigna unguiculata* (L.) Walpers. Caryologia 50(2): 125-138 Chromosome numbers.
- Vereshchagina, V.A., NOVOSELOVA, L.V. 1997. Reproduktivnaya biologiya *Medicago lupulina* (Fabaceae). (Reproductive biology of *Medicago lupulina* (Fabaceae).) Bot. Zhurn. 82(1): 30-39 Russian, illus. at end of issue.
- Vilela, A.E., PALACIOS, R.A. 1998. Nueva clave para la identificacion de especies sudamericanas del genero *Prosopis* (Mimosaceae). Arnaldoa 5(1): 57-66 lcones, Anatomy and morphology, Keys.
- Vilela, A,E., PALACIOS, R.A. 1997. Adaptive features in leaves of South American species of the genus *Prosopis* (Leguminosae: Mimosoideae). Bull. Int. Group Study Mimos. no.20: 62-70 illus. Icones, Anatomy and morphology.
- Villiers, J.F. 1997. A new species of *Albizia durazzini* (Leguminosae: Mimosoideae) from Madagascar. Novon 7(4): 420-422 illus. Icones, Maps, Anatomy and morphology.
- Vincent, M.A., Morgan R. 1998. *Trifolium jokerstii* (Leguminosae, Papilionoideae), a new species from Butte County, California. Novon 8(1): 91-93. Illus. Icones, Anatomy and morphology.
- Vyas M.B., Sharma, K.C. 1998. Spermoderm patterns in some Mimosaceae. Feddes Repert. 109(1-2): 67-72. Illus.
- Ward, D.B. 1998. Pueraria montana: the correct scientific name of the Kudzu. Castanea 63(1): 76-77
- Welsh, S.L. 1998. Astragalus (Leguminosae): nomenclatural proposals and new taxa. Great Basin Nat. 58(1): 45-53 Anatomy and morphology, Keys.

November 1998 17

- Welsh, S.L., Caplow, F., Beck, K. 1997. New variety of *Astragalus* conjunctus S. Watson from Benton County, Washington. Great Basin Nat. 57(4): 352-354 Maps, Keys.
- White, S.D., Myers, S.J. 1997. Evidence of Astragalus lentiginosus var. borreganus growing from a heteromyid seed cache. Southwest. Nat. 42(3): 328-329
- Wu Y.H. 1998. (New taxa of the genus Astragalus from Qinghai.) Acta Bot. Yunnanica 20(1): 35-40 Illus. Chinese. Icones, Anatomy and morphology.
- Wu, Y.H. 1997. (Three new species of the genus *Oxytropis* from Qinghai.) Acta Bot. Yunnanica 19(1): 33-37 illus. Chinese Icones, Anatomy and morphology.
- Wu, Y.H. 1997. (New taxa of the genus *Astragalus* from Qinghai.) Bull. Bot. Res. North-East. Forest. Univ. 17(1): 33-38 illus. Chinese Icones, Anatomy and morphology.
- Xie, C., MOSJIDIS, J.A. 1997. Influence of sample size on precision of heritability and expected selection response in red clover. Plant Breeding 116: 83–88.
- Xu, Y., Liu, Q. 1997. (New names for two Astragalus plants.) Acta Bot. Yunnanica 19(2): 190 Chinese
- Yamanaka, T., OHASHI, H. 1997. (Millettia japonica form. microphylla growing wild in Japan.) J. Jap. Bot. 72(5): 309-310 illus. Japanese Icones.
- Youngman, R. 1998. Astragalus danicus on high. BSBI News no.78: 46
- Yurtsev, B.A. 1997. Analysis of evolutionary differentiation in some key arctic-alpine taxa *Dryas*, *Oxytropis* sect. *Arctobia* and *Taraxacum* sect. Arctica: Op. Bot. no.132: 27-37 Maps, Chromosome numbers, Anatomy and morphology.
- Zakirova, R.O., ABDULINA, S.A. 1997. Khromosomnye chisla vidov roda Oxytropis DC. (Fabaceae Lindl.) Kazakhstana. (Chromosome numbers of genus Oxytropis DC. of Kazakstan.) Izv. Natsion. Akad. Nauk Resp. Kazakhstan, Ser. Biol. 6(198): 78-79 (1996 publ. 1997) Chromosome numbers.
- Zanin, L.A., Cangiano, M.A., Losinno, H.N. 1998. Numeros cromosomicos en *Acacia* (Fabaceae) de la provincia de San Luis, Argentina. (Chromosome numbers of *Acacia* (Fabaceae) from San Luis province, Argentina.) Darwiniana 35: 45-48 Illus. Chromosome numbers.
- Zarre, M. S., Duman, H. 1998. Notes on Astracantha marashica (Fabaceae). Sendtnera 5: 287-292. Illus.
- ZHANG, D., CHEN, T.C. 1998. Three new taxa of *Bauhinia* (Leguminosae) from China. Nordic J. Bot. 18(2): 141-145 Illus. lcones, Anatomy and morphology.
- Zhang, M.L. 1998. (A preliminary analytic biogeography in *Caragana* (Fabaceae).) Acta Bot. Yunnanica 20(1): 1-11 Chinese Zhang X., Li X., Wei L., Cui J. 1998. (The interspecific hybridization of *Glycyrrhiza* in Xinjiang.) Acta Bot. Bor. Occid. Sin.
- 18(1): 132-136 Chinese, Reproductive biology.

 Zhang, M. 1997. (A reconstructing phylogeny in *Caragana* (Fabaceae).) Acta Bot. Yunnanica 19(4): 331-341 Chinese

 Zhao, Y., Liu, L. 1997. (Ecological geographic distributions specificity of flora of *Oxytropis* in NeiMongol.) Acta Sci. Nat.
- Zies, P. 1998. News about nickernuts. Drifting Seed 4(2): 4 Illus. Icones.

Univ. Neimongol 28(2): 200-212 Chinese, Maps.

ErataS. Bandyopadhyay

Due to unavoidable printing mistakes the following is an Erata to The Identity of *Lasiobema horsfieldii* Miq. (Leguminosae: Caesalpinioideae) by S. Bandyopadhyay & K. Thothathri (1993). J. Econ. Tax. Bot. 17(3): 693–696.

Page	Column	Line	For	Read
693	right	7	137694*	137694
	-	16	147697	137697
694	left	5	23114	27114
	right	8	non Roxb.	Roxb.
		10	285	285!
		29	on	an
		32	Herd.	Herb.
			sab.	sub.
		33	Prowota	Prowoto
			exhibei	exhibet
695	left	5	1132	1932
		6	S.C. Lau	S.K. Lau
		13	horsfleildi	horsfieldii
		15	1673	1973
	right	16	Flore du Laos	Flore du Cambodge, du Laos
696	right	1	VOSS, E.	VOSS, E.G.